

# Claims:

1. A data transfer network comprising a TFTP server connected to transfer data to a series of client apparatus connected to the network and when data is to be transferred, one of the clients is designated the master client and the speed of requests for data from said master client determines the rate of transfer of the data to all of the clients characterised in that the rate of transfer of data to each client when elected the master client is monitored and compared with a predetermined transfer rate and if, from the comparison, it is identified that the transfer rate is longer than the predetermined data transfer rate, the TFTP server elects another client which is available, as master client.
2. A data transfer network according to claim 1 characterised in that the TFTP server elects a client as master client which has shown the fastest rate of transfer from the series of clients.
3. A data transfer network according to claim 1 characterised in that the predetermined transfer rate is preset as an optimal time for the transfer of a certain amount of data.
4. A data transfer network according to claim 1 characterised in that the master client is monitored for a set period of time to allow comparison with the pre-determined transfer rate.
5. A data transfer network according to claim 1 characterised in that the transfer rate for each of the clients, when elected as master client, is recorded over a period of time and stored in a database of transfer rates, the server using the database so that on each occasion the server elects as master client the client which shows the fastest rate of transfer in the database.

6. A data transfer network according to claim 5 characterised in that if the first client which the server attempts to use as master client is not available, the server attempts to elect a client from the database based on an ascending order of client transfer rates.
7. A data transfer network according to claim 5 characterised in that the database is updated on each occasion when a client is selected as master client.
8. A data transfer network comprising a TFTP server connected to transfer data to a series of client apparatus connected to the network and when data is to be transferred, one of the clients is designated as the master client and the speed of requests for data from said master client determines the rate of transfer of the data to all of the clients characterised in that if one or more clients is disabled and cannot act as a master client to receive data, this is identified by the TFTP server by monitoring network management messages which identify the disablement or unavailability of the client and whereupon the TFTP server does not attempt to elect the said client as master client.
9. A data transfer network according to claim 8 characterised in that the network includes ICMP servers and monitors the operation of the said servers to identify those clients which are unavailable or disabled, and until it identifies that the said client is live once more, will not attempt to elect that client as the master client.